GRUMMAN
plane news

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Tomorrow's airborne classrooms. *Ron Dahl (sitting) and Don Colquhoun go over the instrument panel in the trainer cockpit mockup. The Beech-built forward fuselage mockup is in the background.*

Link forges stronger VTXTS team

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Computer helps bag a killer

- pg. 3

The best little high-tech house in Texas

- pg. 4

Regional offices cover the territory

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Regional office holds key to business opportunities

Across the nation, Grumman's regional offices are assisting in the expansion of Grumman's business base.

Nationwide

"Our regional offices do more than increase the company's national visibility," states George Brown, Grumman Corporation Vice President-Regional Offices. "They are set up to be a resource for all Grumman companies."

Today, Grumman Corporation operates four regional offices. Bill Schwendler Jr. directs the Southeastern office from Atlanta, Georgia. Located in Dallas, Texas, the Southwestern office is headed by Terrell Kirk Jr. Dave Webster Jr. is in charge of the Midwestern regional office in Chicago, Illinois. From Los Angeles, California, John Norris handles the Western region. A Northeastern regional office will be established in the future.

In the know

"These managers make it their business to know their regions," says Brown, who talks on the telephone with each of his managers daily.

Regional office services run the full gamut from assisting Grumman companies to select plant and office sites to supplying information about potential suppliers and customers. "The corporate regional office's marketing role is not fixed or limited," states Brown, "it's constantly growing and evolving.

'The corporate regional office's marketing role is not fixed or limited. It's constantly growing and evolving'

"By staying on top of what's happening in each region, we can help coordinate Grumman's marketing activities," states Brown. "We offer each Grumman subsidiary an extended capability to better cover both its existing and potential marketing efforts."

A phone call away

Brown and his associates urge Grumman business travelers to give them a call before flying to their regions. "We might be able to save you a trip or make your trip easier," says Brown.

Because of their centralized locations, the regional offices also house Grumman Aerospace Procurement and Seller Quality Control personnel and sales representatives from Grumman Allied Industries and Grumman Data Systems.

Even if your travel is necessary, the corporate regional office can offer you a home base to work from during your visit. Office space and telephone service are available.

Two-way street

"How well the corporate office system works to help expand the company's nationwide business base depends heavily on two way communication," emphasizes Brown. "It doesn't make good business sense to be collecting a wealth of information and volumes of contacts, if nobody uses them."

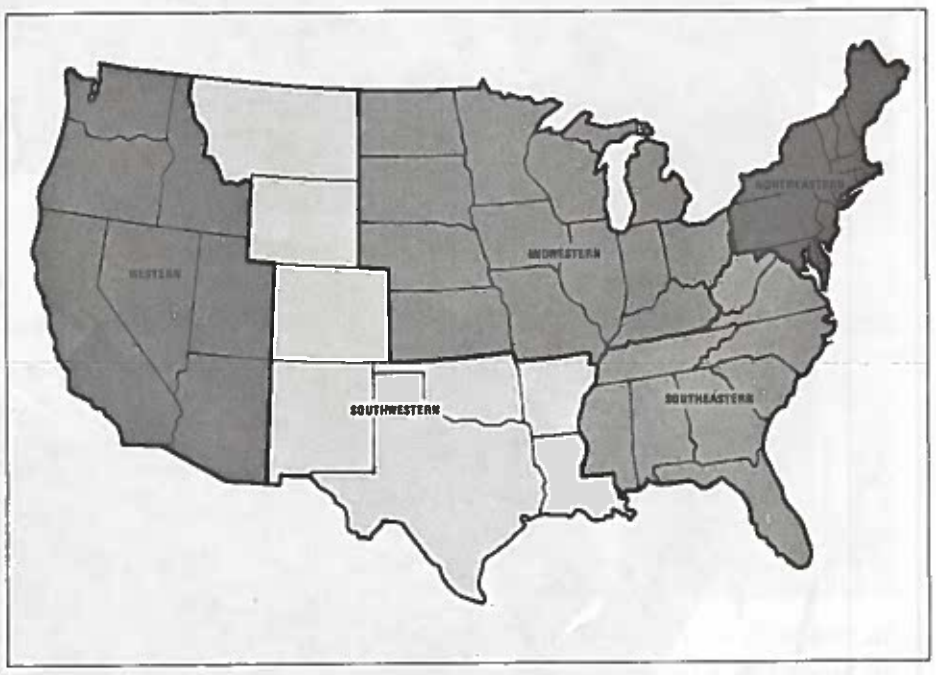
The four corporate regional office managers can be contacted at the following locations:

Southeastern — Bill Schwendler Jr., Grumman Corporation, 1420 First National Bank Tower, Atlanta, Georgia 30383. Telephone: (404) 588-1351.

Midwestern — David Webster Jr., Grumman Corporation, 2360 East Devon Avenue, Des Plaines, Illinois 60018. Telephone: (312) 298-943.

Southwestern — Terrell Kirk Jr., Grumman Corporation, 13999 Goldmark Drive, Dallas, Texas 75240. Telephone: (214) 231-7174.

Western — John Norris, Grumman Corporation, 999 North Sepulveda Boulevard, Suite 510, El Segunda, California 90245. Telephone: (213) 615-0123.



Reunion. *At Grumman Corporation's recent marketing conference in Bethpage, Vice President George Brown (C) gets together with the four regional office managers (L to R) Bill Schwendler Jr., John Norris, Terrell Kirk Jr., and Dave Webster Jr.*

Need a ride?

BETHPAGE: To plt 35 via Wantagh Ave or Hicksville Rd. Ride needed - will pay wkly - 8 - 4:30 pm H. Roach X3936

BROOKLYN: (Canarsie) To Pl 1, 7:48 to 4:18 M. Kraten X6114/(212)251-6087

CENTRAL ISLIP: To Bethpage nite shift 5 pm O. Taylor 582-4896

COMMACK: Mayfair shopping center area looking to join or start car pool pl 35 8 - 4:30 M. Schwartz 2317/2072

COMMACK: To Calverton plt. 06, 07, 08 7 am - 3:30 pm shift M. Romaglino X6909 X6577

E. QUOGUE OR VIC.: To Melville plt 9 or 40. Join or form car pool, 7:30 - 4:00 pm A. Zurowski X8534/728-1120

HAUPPAUGE/COMMACK: To Calverton pl 6, 7, 8 - 8 am 4:30 pm R. Bracco X117-7440

HOLBROOK: Sayville, Oakdale & Vic via Sunrise Hwy to S.S. Pkwy to Bethpage, approx 7:45-8 - 4:15-4:30. B. Smith X6149

ISLIP: area to plant 6, 7:00-3:30. I. Russo, 117-6618

OCEANSIDE: To Bethpage plants 5 and 25, existing car pool has vacancy. 8 am - 4:42 pm H. Halperin X9483

SMITHTOWN / HAUPPAUGE / NESCONSET: Form or join car pool to Bethpage, 7:48/8:00. J. Hickey X7752 or 265-779 eves

Help for vets

Bob Reagan of the Nassau County Veterans Service Agency visits Grumman every third Thursday of the month.

Reagan sets up shop in the Plant 28A auditorium. Plant 28A is on South Oyster Bay Road across from the Plant 20 Transportation garage.

Badges are not needed to enter this plant. Grummanites and retirees can stop by Reagan's temporary office throughout the workday.

Grumman computer helps nab fugitive

Albert Victory, one of the FBI's 10 most wanted criminals, is back behind bars today — thanks in part to a computer program developed by Grumman Aerospace's Corporate Systems Department.

An escaped cop-killer and New York's most wanted criminal, Victory was captured in California on Tuesday, February 24, after nearly 34 months of freedom.

Early last fall, the New York State Police contacted Grumman to ask for help. "They were frustrated by the accumulated clues and dead-end leads," says one Grummanite involved in the public service effort. "The police had gone to other outfits before us. One firm said that it would take three years to develop a computer system that would help the police. Another company responded with a lot of 'computerese.' "

Grumman computer specialists sat down with State Police Capt. Joseph Strojonowski and a few other officers. "They told us their problem and we went to work," says a computer specialist who works on special prototype programs

Grumman keypunch operators began inputting the data the police had been collecting. Between 10,000 and 12,000 telephone numbers and over 6,500 other bits of information were fed into the computer.

Within a couple of weeks, everything was ready to go; a terminal was set up in the police headquarters in the World Trade Center in New York City.

What eventually evolved was a sophisticated little computer system.

"In the past few months, we've been able to demonstrate Grumman's system to other law enforcement officers," says Capt. Strojonowski. "Even two inspectors from Scotland Yard conceded that they did not have such a capable computer system."

By using Grumman's computer, police investigators were able to discover a pattern to Victory's movements around the country since his escape from a prison in upstate New York in May 1978.

Investigation underway

The computer system came in handy on more than one occasion.

"Once, the FBI was following a suspected accomplice who was leaving Miami airport, " says Capt. Strojonowski. "During a heavy rainstorm, they lost the suspect and immediately contacted us in New York. The investigator manning the terminal at the World Trade Center office used the computer. It quickly listed five places the suspect could have gone in the area where she disappeared. Within the hour, the FBI was back on her trail."

"The police were particularly impressed with the flow chart the computer would produce. It showed the interrelationships of the telephone calls from one suspect to another," says the computer expert. Before long it produced complicated charts that enabled police to plot Victory's movements through New England, Florida, Canada, and eventually, California. A major break through came when police zeroed in on Stephan Goldman, Victory's righthand man in Florida.

When keeping Goldman under tight surveillance, police discovered a package mailed from Florida to Lafayette, California. The destination of the package turned out to be Victory's hideaway in a suburb of San Francisco.

It's history

"Remember we've been after Victory for over 34 months," says Capt. Strojonowski. "If it wasn't for Grumman's help we'd still be trying to track down Victory."

L.I. gets dumped on. *While the temperature hit 81° in Stuart, Long Island enjoyed six to 12 inches of snow on Thursday, March 5. The job of pushing tons of snow away from parking lots and fire hydrants and moving traffic fell to people in Maintenance, Transportation and Plant Protection. People in Food Services kept everyone fed. The crews started moving snow at 9 a.m., according to Facilities Maintenance general manager George Turney. They worked around the clock and, by Friday, had cleared the way for everyone to get to work.*

GRUMMAN plane news

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Investment plan meeting set for April 23

Next month, members of the Grumman Employee Investment Plan (EIP) will meet with investment plan managers. All active EIP participants are invited to attend the annual meeting on Thursday, April 23, in the Plant 28A auditorium.

Fiduciary Trust Company, Bankers Trust Company and The Aetna Insurance Company will be represented at the meeting. Representatives from Fiduciary will discuss their investment philosophy and examine some of the market indicators that influence their investment decisions.

During the annual meeting, attendees may ask questions about the Investment Plan. In order that a maximum number of inquiries can be answered in the allotted time, the Employee Investment Plan office suggests that you fill out the form on this page if there are certain topics you'd like discussed. Mail your inquiry to: Employee Investment Plan, A03-28.

According to Kay Trestka, administrator for the EIP, the meeting is scheduled to begin at 5 p.m. so that a majority of those wishing to attend may do so on tneir own time. Those who find it impossible to attend will be able to follow what occurs at the meeting through a summary printed in *Plane News*.

Investment inquiry

I'd like to have the following topic discussed: .....

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Mail to: A03-28

Grumman Houston: dynamite team in

The big radio station in Houston, Texas, is KIKK. In their advertising, the K's look like cowboy boots, and their slogan is, "KIKK: The Reason God Gave You Ears." They play country-western music in between commercials — many of which are employee recruitment ads for the big corporations that have settled in this sprawling, sunbelt city. With more than 1,000 families moving into the area every week, Houston is still very much a boom town.

Grumman Houston Corporation, a wholly-owned subsidiary of Grumman Aerospace, is keeping pace with that growth. Now in its eighth year of operation, Grumman Houston is moving into 1981 with the highest business backlog in its history. Last year, sales were $23 million — an increase of 32 percent over the 1979 figures. An additional 50,000 square feet of growing room was added in 1980, and the number of people wearing Grumman Houston badges jumped from 335 to 460. Sales for 1981 are expected to top $30 million.

'The petroleum industry is going to be very bullish for the next five to 10 years. That gives us a time cushion to work out our next goal, which is to develop our own product line'

Jack Buxton

"Grumman established a presence in Houston in 1962 to support the Apollo program," says Grumman Houston President Jack Buxton. "But by the time Apollo was over, we had good reason not to just pull up stakes and go home. It was apparent that the aerospace and petrochemical industries had very compatible technologies; I felt that the business opportunities here were tremendous."

Careful expansion

Grumman Houston started expanding its business base in a very careful, deliberate fashion.

"In the beginning, a good percentage of the work we did was subcontracted from Grumman Aerospace," Buxton observes. "And it was a good way to show off our electronics capabilities to a potential customer. They'd come in and see us building harnesses for the F-14, one of the most sophisticated aircraft in the world, and they'd know we could do anything they might need. Our people were familiar with calibrated tools, precise soldering techniques, and military specifications. Well, the oil industry requires similar precision and shares aerospace's need for rugged, reliable equipment that performs in a hostile environment."

Although Grumman Houston still does about $2 million worth of work for the parent company, it is now in the position of subcontracting considerably more work back to Long Island. Only last month, teamwork between Grumman Houston and Aerospace's Great River facility paid off in a $15-million pact from Schlumberger Well Services to manufacture their Cyber Service Units (CSUs).

Grumman Houston Corporation was named prime contractor to provide CSUs to be delivered in 1982; the contract is expected to have long-term follow-on potential. Great River will provide a substantial amount of the hardware which will be integrated with Grumman Houston hardware. Final test and installation will be performed at Grumman Houston.

"By being located in Houston, we are in a position to open up opportunities that Grumman wouldn't otherwise see," Buxton says. "And it gives our customers the best of both worlds. They get to deal with a small company, with a small company's flexibility and rapid response. But they also get the total resources of a large, high-technology corporation."

Schlumberger (pronounced Schlum-bear-zhay) is now Grumman Houston's biggest customer. The international firm provides information to the oil industry on the location, quality, and quantity of oil or gas in a well. To get this information, sensors attached to an armored electrical cable called a wireline are lowered down the drill hole to measure the depth and physical properties of geological formations. These measurements are recorded on a graph called a "log" which resembles an electrocardiogram printout.

Schlumberger has been extraordinarily successful. It now holds 50 percent of the U.S. market and as much as 90 percent of the foreign markets for logging services, according to *Business Week* magazine.

Sole source

The Cyber Service Unit is the electronic center of two major units that Grumman Houston builds for Schlumberger: the Offshore Unit, and the Truck Van Instrument.

The Off Shore Unit is a self-contained, computerized control room used on oil rigs at sea. Grumman Houston delivered 50 of these last year, and as sole source contractor will deliver 72 this year.

The Truck Van Instrument is a similar unit — a mobile laboratory, but with four-wheel drive. As sole source, Grumman Houston will deliver six of these in 1981.

The Modular Skid Unit is equipped with less sophisticated instrumentation. Another sole source contract, 18 will be delivered in 1981. Grumman Houston is also building a number of harnesses, computer racks, and other equipment for Schlumberger.

Confidence, respect

"The growing amount of work we do for Schlumberger, especially the sole source contracts, is evidence of their confidence and respect for our company," says Buxton. "We give them quality hardware, on time, at a competitive price. And because of that, our working relationship has been outstanding."

Other petrochemical equipment companies have also come to rely on Grumman Houston. The Western Company of North America and Cameron Iron Works account for $6 million in sales annually.

"The petroleum industry is going to be very bullish for the next five to 10 years," says Buxton. "That gives us a time cushion to work out our next goal, which is to develop our own product line.

"And while we're building equipment for other companies, we're gaining valuable experience to strike out on our own. A mechanical system related to oil exploration would be our most likely target."

The Surface Drilling Log (SDL) might fit the bill. The SDL allows logging while drilling; the drilling process doesn't have to be interrupted to lower a sensor down the hole.

Other pursuits

"Texaco developed the SDL, and it is under license from them," Buxton explains. "We will pay royalties to Texaco — but we will build the SDL and it will be our product."

Grumman Houston has already built three of the units; one is now being field tested.

Although the petrochemical industry dominates the company's activities, Grumman Houston is involved in other pursuits as well.

Bell Helicopter, in nearby Fort Worth, draws on Grumman Houston's expertise in aerospace electronics. Grumman builds flight control sensor assemblies and other equipment for Bell.

The National Aeronautics and Space Administration (NASA), the reason Grumman first came to Houston, has remained an important customer. Grumman Houston is under contract to support the Grumman-built Shuttle Training Aircraft, and also builds a number of small emergency tools that will be carried onboard the Shuttle Orbiter.

"Our relationship with NASA continues to be a very important one," says Buxton. "As the Orbiter matures, NASA will need any number of tools and devices for a variety of tasks during forthcoming missions. Because of the Apollo program, we're a known quantity to them. . .and being right around the corner from NASA's Johnson Space Center doesn't hurt, either!"

a boom town

But Buxton knows there is more to Grumman Houston's success story than a fortunate coincidence of time and place.

"We have put together a winning team — people with ability and enthusiasm," says Buxton. "We have people from all over the country; from the auto industry in Detroit, from upstate New York, from the Midwest. They came to the sumbelt area looking for more opportunity and challenge than they could find in their own backyards. . .and we have reason to believe they found it here in Houston."

Wireline logging. *To get information about the location, quality, and quantity of oil in a well, an instrument is lowered into the drill hole at the end of an armored electrical wireline. Via the wireline, measurements of the depth and physical properties of the underground formations are transmitted to a mobile surface laboratory to be recorded and analyzed. (Source: "This Is Schlumberger," published 1980 by Schlumberger Ltd.)*

Simulation leader makes it three

Link joins Grumman and Beech in VTX bid

"Link" is the latest name in the VTXTS competition.

The Link Flight Simulation Division, a Binghamton, New York-based division of the Singer Company, joined Grumman and Beech Aircraft in their bid to build the Navy's proposed VTXTS jet pilot training system.

"As the VTXTS competition intensifies," says President of Grumman Aerospace George Skurla, "we especially welcome Link's decision to join the Grumman/Beech team in our bid for a comprehensive pilot training system for the Navy of the future."

Grumman and Beech are both longtime Navy aircraft builders, and Link— the world's major supplier of simulation and training systems— adds another dimension to the VTXTS team.

Industry leader

With more than 50 years as the industry leader, Link has supplied flight simulators and training systems for undergraduate pilots to all of the U.S. armed services and many foreign military services.

Link's current Navy involvement includes programs with the Naval Training Equipment Center, Naval Air Systems Command, Naval Air Training Command and fleet operating units.

In August 1980, the Grumman/Beech team won a $500,000 contract in the VTXTS program's preliminary competitive round for initial concept definition study awards.

Under this contract, the Grumman/Beech/

Link team developed a program report and delivered it to the Navy on March 2. The report details the team's solutions to all aspects of the VTXTS program: jet aircraft production, spare parts and associated hardware, flight simulators, instructional materials and the training curriculum.

All six of the companies and teams still in the VTXTS competition were to have submitted similar reports by the March 2 deadline.

Link pioneered aviation training

Grumman, Beech and Link have more than the VTXTS in common. All three companies were founded by aviation pioneers.

But, while Leroy Grumman's and Walter and Olive Ann Beech's companies were making airplanes, Edwin A. Link's made pilots. Ed Link figured out how to teach potential pilots what flying was like before they ever left the ground.

Learning to fly in the '20s cost $25 to $50 a lesson — and that was usually just for the ride. Most pilots weren't in a hurry to turn the controls of their planes over to rookies.

To replace flying time, Link got much of his early flying knowledge by taxiing a friend's plane along the runways of the Cortland and Endicott, New York, airfields. By wiggling the plane left and right, Link learned hand and foot coordination. World War I pilots had named this technique the "penguin system".

Groundwork

All the while, he was working in his father's piano and organ factory. There, he learned about pumps and valves and began to wonder: Could they, somehow, be applied to build a device — a pilot trainer — which could teach fledgling pilots better than the penguin system?

It took Link a year and a half to build a trainer.

His first trainer was really a little airplane without wheels or engine. It was mounted on a universal joint and moved by organ bellows, under the command of the student sitting in the cockpit. Link even added instruments.

With it, Link opened a flying school with his brother. It was 1929.

As the depression began to take effect, flying lessons became more of a luxury and hard times hit the Link school.

But things turned around for Link in 1934. The Army Air Corps was looking for better ways to teach its mail pilots how to fly in bad weather. They were so impressed with Link's own ability to fly through a thick fog to make a meeting with them that they ordered six of his trainers for $3,400 each.

Since then, Link's company has expanded tremendously. Through the years, it has developed not only electronic flight simulators, but also submarine and maritime trainers, tracked vehicle simulators, train simulators, and even nuclear power plant simulators.

Link is no stranger to Grumman. They built the flight trainer for Grumman's F8F Bearcat and simulators for the Lunar Module and the F-14.

Start out small. *It took great pilots, too, to down enemy aircraft in World War II. American pilots learned about flying in Link's 'blue boxes,' here being built in the company's Binghamton, New York, plant.*

Pistol shooters zero-in on industrial league

Grumman's varsity pistol team, with a 8-1 record, currently leads Division I of the Long Island Industrial Rifle and Pistol League. In the first week in February they marked their eighth victory, against Old Bethpage Rifle and Pistol Club by a 1120-1055 score. Grumman's scoring was paced by Tony Scesny (288 out of a possible 300), Ron Trenkner (280), and "Whitey" Northridge and Dave Rice (276s).

Grumman has three teams in the League's Division III, and the E team is sitting in the number one spot with an almost perfect 6-0-1 record. The team's scoring leaders in the last two victories, against the Pistol Club of East Meadow and Kollsman Instruments, were Sy Cohen (247) and Jim McCann (257), respectively.

Also competing in Division III are Grumman's B and D teams. Before they faced each other in a recent match they both had 2-2 records.

The B team defeated the D team by only 78 points in a match where the two team leaders chalked up the same score. Both Joe Parisi of the B team and Art McKee of the D team had 255s.

In what Dick Van Valkenburgh, chairman of the Pistol Division of Grumman's Rod and Gun Club, considers a strong Division II, Grumman's C team hasn't been able to post a win this season. In spite of good performances by Harve Sperling (248) against PJM Rifle and Pistol Club of East Islip and Dick Johnson (233) against Brentwood Sportsmen, the team marked its fifth and sixth losses of the year.

In the International Division, where teams compete using larger than .30 caliber pistols instead of the small-bore 22s used in the other divisions, Grumman's Center-fire team holds a 5-2 record.

In a tough battle against the "Punkin-on-a-Post" Pistol Club of East Islip, the name "Scesny" appeared twice on the scoresheet, and it wasn't an error. The husband and wife team of Tony and Barbara Scesny shot 286 and 265, respectively, in the heart-breaking two-point loss.

The team bounced back, however. Led by Dave Rice (280), they beat Brentwood 1049-1028.

obituaries

VINCENT J. TANCREDI of Logistics Services, Pl. 80, died Feb. 2 at the age of 51. He had been with the company since 1955 and resided at 14318 Sandown Ct., Poway, Calif. 92064

BERNARD MILLER of Support Equipment Prod., Pl. 5, died Feb. 13 at the age of 55. He had been with the company since 1947 and resided at 260 Sea Cliff Ave., Sea Cliff.

SIDNEY S. JOHNSON III of Logistics Services, Pl. 94, died Feb. 18 at the age of 43. He had been with the company since 1973 and resided at 6465 Dugriesne Place, Virginia Beach, Va. 23464

ALFRED E. SANTINI of Industrial Safety/Hygiene, Pl. 2, died Feb. 19 at the age of 64. He had been with the company since 1968 and resided at 3900 Hickory St., Seaford.

Personals

On behalf of my children and myself I wish to express our deep gratitude to all of Bob's friends and co-workers for their kind expressions of sympathy and their generosity upon our recent loss. Rosemarie Mugno and Family

To all my friends and co-workers: your thoughtfulness, kindness and warm expression of sympathy will always be remembered. Mario Grzan and Family

We wish to extend our sincere thanks to all our friends and associates for their sympathy and kindness during the recent loss of my husband. The Woods Family

I wish to express my deep and sincere appreciation for the kindness, generosity, sympathy and understanding shown by my co-workers and friends during the recent loss of my mother. Codella Evans

(Continued on page 8)

Set to make their marks. *Grumman's men's and women's varsity bowling teams will be meeting the best opponents Long Island industry can muster. Members of the men's team are: (L to R, back row) Bob Kohlhoff, team captain Ed Gabriel, Jim Miccò and Jack Nielsen; (front row) Fred Dick, Ben Plawski, Dave Evans and Lenny Trifaro; Judge Locke and Frank Tucholski were not present. The women's team is made up of: (L to R) Maureen Croes, Olga LaBarbera, Rita Mathia, Ellen Steimle, team captain Pat Ogilvie, Joanne Loeffler, Arleen Schwemmer and LuAnn Calsetta.*

Pick up order form before you see eye doc

Your safety department would like to make it easier for you to take care of your eyes. If you need prescription safety glasses, stop by your local ESO or plant safety office and pick up an optical form and instructions *before* you visit your eye care specialist. Grumman will make safety glasses to your specialist's prescription.

New way to go

Safety personnel used to transcribe prescriptions from the specialists' forms onto the Grumman optical form. Now, to make service more efficient, they ask that you have your specialist write the prescription directly on the Grumman form.

Once you've gotten the form filled out, bring it—don't mail it—to Grumman's opticians. They visit Bethpage (Plants 1, 2, 3, 5), Calverton (Plant 6), Melville (Plant 40), and Great River (Plant 43). Your ESO has the schedule of the opticians' visits to the safety equipment office in each of those plants. (Installations not served by the locations listed will continue their present safety eyeglass policies.)

For more information, call the Grumman opticians between 8 and 10 a.m., Monday through Friday, Ext. 111-2628.

Skiers win major trophy

January 1981 was a very good month for Grumman Ski Club racers. The U.S. Amateur Ski Association National Standard Races (NASTAR) officials selected Grumman for its most prestigious club trophy for the month of January.

NASTAR awards three trophies each month to the nation's competing ski clubs. Grumman won the award for the ski club with the lowest average handicaps of the three best men and women racers.

The Grumman club also won the giant slalom event at the New York Metropolitan Ski Council races held at Pico Mountain, Vermont, on January 31 and February 1.

Three Grumman racers — Barbara Favale, Tony Favale and Bob Connor — have been notified that they are leading contestants for the NASTAR national championships to be held this year at Heavenly Valley, Lake Tahoe. In recent years, three Grumman racers competed in the NASTAR championships: Ed Schneider, Carol Sweeney and Dick Stinson.

scorecard

Oh, Danny boy!

Some people have a golden touch. Take Danny O'Brien of Personnel.

On a recent vacation trip to Florida, he was playing golf at Frenchman's Creek with Bill Robertson, who retired some years ago with 44 years of service. As Danny strode to the 17th tee, he read on his scorecard that it was a 205-yard hole. He selected a driver and teed off. His ball bounced several times, then dropped in the cup for his first hole-in-one.

It wasn't until later that he discovered he had read the wrong yardage on the hole; 205 yards was from the championship tee. He had teed off from the men's tee, 168 yards from the green.

Women's soccer

The Long Island Soccer/Football League is considering having a soccer division for women over 19 years of age. If enough women are interested, Grumman varsity soccer coach Leon Akl says, the company would enter a team in the division. Any women interested in joining should call Akl on Ext. 115-3795.

Tennis trials

Want to be part of a winning tradition? Here's your chance, because the Grumman men's varsity tennis team will be holding tryouts next month. According to Vinny Casale, the captain of last year's Blue team, "All spots on the team are open. We'll be using a rating system to pick the team."

Tryouts are scheduled for Saturday, April 4, from 11 a.m. until 1 p.m. and Sunday, April 5, from 2 to 4 p.m. They'll be held at the Bethpage Tennis Center, Norcross Avenue, Bethpage.

If you want to try out for the team, call Vinny Casale, Ext. 115-3537, to register.

Men's softball tryouts

The tennis team isn't the only varsity squad scheduling tryouts. The varsity softball team, too, will be testing potential new players next month.

But before players suit up for the tryouts, coach Joe Cavalluzzo asks that those who wish to try out attend an organizational meeting on Tuesday, March 31, at 5 p.m. in Plant 28A. Anyone who won't be able to attend should call Cavalluzzo, Ext. 111-3756.

Trophy collector

Earl Seagle, the inspection manager of Plant 66 in Milledgeville, Georgia, has added another trophy to his collection of athletic awards: 1980 William M. Zarkowski Golf Classic.

The tournament was held at the Ocmulgee State Park golf course in McCrae, Georgia. Seagle gets to keep the rotating trophy for six months. It will then be put back into the plant's trophy case until the 1981 tourney is held.

Seagle won the two-day handicap tournament with scores of 87 and 105. What's remarkable about Seagle's win is that he has been playing golf for only a little more than a year.

"I never had the time in New York," says the 30-year Grummanite who's been working in Milledgeville for three years.

With Seagle's other athletic achievements, it might have been expected that he'd do well at golf. In 1949 and 1950, Seagle played center field for the triple-A farm team of the Boston Braves. He is also a former New York State Golden Gloves champion.

In Milledgeville, he trains young local fighters for Amateur Athletic Union competition. Seagle is also the coach of Plant 66's varsity softball team and is helping set up an umpires' association for the area's softball leagues. As part of that job, he is teaching 38 aspiring arbitrators the tricks of that thankless trade.

But there is one other reason why Seagle took the Zarkowski trophy. He owns 10 acres of pasture land which, he found, can be used for more than grazing cows. "I can go out in the pasture and practice," says Seagle. "I play just about every day down here."

calendar

AIAA: Wed., March 25, Antun's, Hicksville, 5:30 p.m., social hour, 6:30 dinner. Guest speaker will be Senior Vice President, Grumman Aerospace, Larry Mead. Guests welcome. S. Miluschewa, Ext. 8830/J. Kohn, Ext. 9744

Aikido Club: every Mon. and Wed., 5:15 p.m., GAA bldg.; for sport and self-defense; L.I. Aikido Federation; all Grumman employees welcome. B. Bauman, Ext. 3013

Alcoholics Anonymous: every Mon., 4:30 p.m., Pl. 15, conference room C, closed meetings; Personnel Relations, Ext. 3521; Calverton: Chemical Dependency Discussion Group, every Mon., 4-5 p.m., Hdq. Bldg.; open meeting. C. Robb, Ext. 117-6526

Amateur Radio Club: Wed., March 18, Conference rooms A and B, Pl. 5. General meeting. Grumman employees welcome. D. Townes, Ext. 2889

American Society of Mechanical Engineers: Wed., March 18, Antun's, Hicksville, 6 p.m. dinner. Guest speaker will be Richard Krajewski, of Brookhaven National Lab. Guests welcome. J. Clevkin, Ext. 6025

CBI Vets Association: Tues., March 31, Recreation bldg., 5 p.m. Guest speaker will be Albert J. Moscatelli. Members are urged to attend. W. Pytlowany, Ext. 8617/R. Fong, Ext. 2484

Coin Club: (Calverton) every Fri., noon lunch, Pl. 6 conference room. W. Kondratowicz, Ext. 6680

Dance Club: every Wed., 5-8 p.m., Recreation Bldg. Guests welcome. G. Cupolo, Ext. 4155

Duplicate Bridge Club: every Thurs., 6 p.m., Recreation bldg. Guests welcome. W. Lipman, Ext. 2506

Fencing Club: every Wed., 4:30-6:00 p.m., Recreation bldg. Guests welcome. J. Hayne, Ext. 5556/P. Chaldaris, Ext. 3638

Folk Dancer's Club: (Calverton) every Thurs., 2nd Floor, Pl. 6, lunchtime, Grumman employees only. J. Hamelman, Ext. 117-6835

Grumman Disabled American Vets Club: Wed., March 18, Pl. 3 cafeteria, 4 p.m. Business meeting. Members only. T. Melia, Ext. 4750

Grumman Toastmasters Club: Wed., March 25, meeting place to be announced. Grumman employees welcome. C. Peterson, Ext. 4930

French Club: Tues., March 24, 123 Grohman's Lane, Plainview, 5:30 p.m. Guests welcome. L. Kaufman, Ext. 2323

Karate Club: every Tues. and Thurs., Recreation bldg., 5:15 to 7:00 p.m., black belt instructors, physical and mental development; beginners and guests welcome. T. Ortiz, Ext. 4764

Model Railroad Society: every Wed., 7 p.m., Recreation bldg. Regular meeting. Guests welcome. R. Muntz, Ext. 115-6330

Motorcycle Club: Thurs., March 19, Pl. 111, classroom, 5 p.m. B. Coutieri, Ext. 4828/K. Mann, Ext. 1645

Roller Skating Club: every Thurs., Levittown Skating Rink, 7:30 to 11 p.m. Guests welcome. E. Barsalona, Ext. 8322

Society of Manufacturing Engineers: Fri., March 20, Woodbury Country Club, 8 p.m. 30th Anniversary Installation Dinner Dance. Guests welcome. V. Pavlik, Ext. 8737

Table Tennis: every Thurs., Pl. 24, 5 p.m. also every Fri., Recreation bldg., 5 p.m. Beginners and guests welcome. B. Fabricant, Ext. 9307

Tennis Club: Wed., March 18, Recreation Bldg., Room B, 5 p.m. Beginners to advanced players welcome. J. Blumling, Ext. 5184/B. Owen, Ext. 7629

'81 softball team managers urged to attend spring meetings

All Grumman teams who plan to play in a Recreation-sanctioned softball league should have a team representative attend one of these preseason meetings:

Plants 1 and 4 lunchtime league: Monday, April 6, 12:15 p.m., Plant 2 receiving area, league commissioner Roe Strazzeri, Ext. 2394.

Plants 2 and 5 lunchtime league: Tuesday, April 7, 12:15 p.m., Plant 2 conference room, league commissioner Joe Frisenda, Ext. 3373.

Plants 6 and 7 lunchtime league: Wednesday, April 8, 12 noon, Plant 6 conference room, league commissioner Ernie Maggi, Ext. 6772.

Plant 3 lunchtime league: Thursday, April 9, 12 noon, Plant 3 conference room, league commissioner Herb Mahoney of Recreation, Ext. 2133.

Plants 43 and 44 league: Tuesday, April 14, 11:30 a.m., Plant 43 conference room, league commissioners Charlie Greco, Ext. 7757, and Robert Albert, Ext. 7956.

Bethpage Nite Owl league: Thursday, April 16, 9 p.m., Plant 2 conference room, league commissioners Charles Hess, Ext. 2628, and Bill Wallace, Ext. 2842.

All after-hours leagues: Tuesday, March 31, 4:30 p.m., Recreation office, Plant 28A. All team managers must complete the form on this page and mail it to Herb Mahoney, A01-28A, no later than April 1. Due to limited amount of fields, managers must indicate which night they wish to play, Monday, Tuesday, or Wednesday. All team managers should submit a temporary team roster at the pre-season meetings.

Field choice

Manager's name. . . . . .

Permanent No. . . . . .

Ext. . . . . .

Mail station . . . . . .

Preference:

first choice. . . . . .

second choice . . . . . .

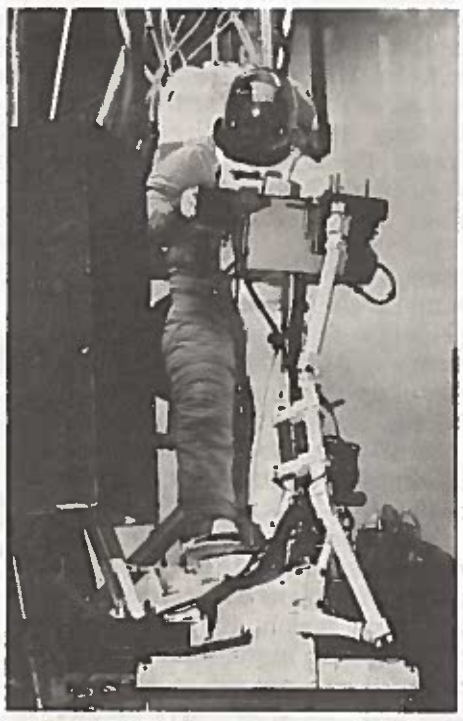
Mail to: A01-28A

Simulator: It's almost like being there

All alone at the end of a mechanical arm attached to the Space Shuttle, the space worker manipulates the controls of his Manned Remote Work Station. Slowly, he maneuvers himself to a position in front of a satellite needing repair. The mechanical arm twists and undulates as he works for just the right position.

At least, that's the way it feels.

The space worker is actually in Plant 14, "flying" the Research Department's Large Amplitude Research Simulator (LARS) in a large, black-walled room. The simulator creates all the movements and dynamic sensations of the Shuttle's work station. LARS can also duplicate the unique flying characteristics of a VTOL (vertical takeoff and landing) aircraft.



One of a kind. *LARS, Research's most sophisticated simulator to date, creates all the movements and dynamic sensations of the Space Shuttle's work station — on earth in Plant 14.*

Unusual trips

"The VTOL and the Manned Remote Work Station (MRWS) pose highly unconventional operator control problems," says Harry Breul, who heads up Research Flying Qualities and Simulation. "Especially the MRWS, which will operate in zero-gravity."

LARS is the most sophisticated simulator that Research has developed to date; it is believed to be the largest one of its type in the country. Computer-controlled and hydraulically driven, LARS has a performance envelope measuring 40 feet by 40 feet by 10 feet high, ". . . large enough to simulate most VTOL hover or MRWS flight tasks," says Breul.

Stepping stone

"We had a smaller device, the Research Hover Simulator, in Plant 5," Breul explains. "It was used very successfully to explore VTOL hover control problems — and it demonstrated the benefits that could be gained from a bigger, still more capable simulator."

With support from Advanced Systems, the Research Department started work on the new simulator, LARS, in Plant 14 in 1979. It was designed with two large, exchangeable upper halves, called "top hats," enabling it to handle both jobs: the MRWS as well as VTOL.

The result, according to Breul, is more than just an important facility for Research activities. "It's a flexible tool to support other corporate programs as well, providing a greatly improved simulation capability on a cost-effective basis — with a cadre of people whose expertise can be drawn upon."

"It's also a lot of fun," grins Stan Coryell of Crew Systems, who has spent a great deal of time flying the MRWS simulation.

"The MRWS uses the 'fly to' control philosophy, which means that you simply point the controls in the direction you want to go," Coryell explains. "It feels something like riding in a car with very bad shock absorbers. We're learning a lot about man in the machine, about how the MRWS will respond to commands. It's destroying quite a few preconceived notions we had."

The second interchangeable "top hat" is now being constructed in Plant 5. It will convert LARS for the VTOL simulation, using the same computers and hydraulic equipment. The exchange will be made late this summer in preparation for both program and Research VTOL studies.

Riding high. *Harvey White (L), Sikorsky Aircraft Vice President of Material Division, presented Stuart Operations with a certificate of achievement for its on-time, quality production of the CH-53E aft section and other Sikorsky products. Accepting for the Grumman team were: Ed Dalva, vice president and general manager, and Tom Doyle, CH-53E program manager at Stuart.*

Personals

(Continued from page 6)

I wish to thank my co-workers and friends for their kindness and sympathy following the recent loss of my mother. Gerald S. Fox and Family

I wish to thank all my co-workers and friends for their kind expressions of sympathy during the recent loss of my mother. Henry Womble and Family

I would like to thank my friends for their kindness and support during the loss of my beloved husband George. Regina Byrd

GRUMMAN plane news

ADDRESS CORRECTION REQUESTED

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